has been to us—most troubles have really been due to excessive use, for wise use demands great care and we might have been better off if DDT cost ten times more than it does; and (b) to the facility with which people may both repeat and embellish information uncritically. I am reminded of the British World War I story about the weaknesses of the field telephone. An urgent mesage, "Send reinforcements. We are going to advance," finished up as "Send three and fourpence. We are going to dance." That is just how information often gets transformed nowadays.

J. RALPH AUDY, M.D., PH.D. Director, G. W. Hooper Foundation San Francisco

San Francisco

To the Editor: Professor Thomas Jukes has been a perennial letter-writer in defense of DDT. I've never fully understood why. His facts are accurate as far as they go, but his premises and judgments can easily be debated.

The most revealing thing about Professor Jukes' letter is that he apparently does not grasp the full meaning of California Medicine's Ecology issue. For one thing, I agree with him on the question of residue levels in human milk. I see no evidence of harm. What he overlooks however is that no one wants these residues, particularly without either control or knowledge of their intake. That is the issue. Applied toxicology is not simply an LD<sub>50</sub> extrapolated. Nor does simple arithmetic extrapolation remove the food-chain effects as in the "Sarawak" example he in effect ridicules. We do actually have DDT and a number of other residues existing in the general environment in both physical and biological components. The documentation is impressive. So also are the biotic complications, being all too slowly revealed. The suggestion is now very strong that the "threshold concept" characterizing much toxicological study and monitoring activity is an improper basis for social judgment. For too long toxicologists and biochemists have defined their studies narrowly. They should as well consider the "Uncertainty Principle" and when recommending chemical prescriptions, for whatever good purpose, incorporate the total potential of the recommendations. DDT is an excellent example of a chemical in use defined and recommended on fractional grounds. The number of governments, national and provincial, which have banned or restricted DDT usage is increasing. No one doubts the fractional value of DDT; many doubt its value when the totality is considered.

Debate can be continued almost indefinitely. I suggest however that Professor Jukes read carefully the entire issue of California Medicine's November issue and react as well to other "signs of the times." The current humanistic up-welling exemplified in ecological awareness is by no means casual and shallow.

ROBERT L. RUDD, PH.D. Professor of Zoology University of California, Davis

## **Ecological Health**

To the Editor: You will recall that I had implied in my earlier correspondence with you about your September editorial that the application of your "new ethic" as a solution to the alleged overpopulation problem was anti-democratic and anti-humanitarian. And that you had implied, in your personal letter to me (10/20/70), that I had somehow misunderstood your "intent" in that editorial. But as if to verify the accuracy of my initial assessment of the ultimate implications of your ideology, and as if to answer my initial criticisms negativistically; you have subsequently pursued this same subject of "wherein lies the physician's responsibility" in the far-reaching implications of coercive population control, in your November editorial, in which you reiterate, even more strongly, the totalitarian thesis presented in your September editorial:-that the "ecological realities" will impose "further restrictions on personal freedom" (e.g., the freedom "to procreate"); that "universal compliance with certain decisions" will be necessary; that "traditional value systems" (ethics?) may need to be replaced; that some people will predictably resist these restrictions in favor of "their own ideas of freedom"; that such "emotion must be harnessed"; and finally, that physicians must prepare to "advise" patients and "even world governments" along these lines.

And as if to further verify the totalitarian slant of your ideology; in this same November editorial, you have extolled, without any apparent qualifications, as being "fascinating and authoritative," all of the articles which make up what you call "an excellent and unusual symposium," in this same issue of California Medicine. Among those authors for whom you have such high praise are these:

Garrett Hardin, Ph.D.:-who suggests that we physicians should feel ashamed of the "misery" we have caused in "saving lives" over the years; but that we might be forgiven for such wellintended mischief, presumably only because we acted out of "ignorance" of the harm we were doing. He hints that we physicians might redeem ourselves if we will only help "to create a new climate of opinion" for the public support of measures stronger than "voluntarism and persuasion" in the "community control of breeding." He believes we should at present push only for voluntary abortion and sterilization until the time is ripe for "positive community control of the number of children produced." And until we arrive at this final dictatorial stage, he believes that we might control a person's right to have children by issuing a limited number of "green stamps . . . which could be bought and sold in the market, like stock options." Furthermore, he believes we should replace ". . . every man's death diminishes me. . . ." with a saying, which he asserts is "nearer the truth": i.e., "Every babe's birth diminishes me."

Kingsley Davis, Ph.D.:-who calls this the "century of the population (people?) plague"; who puts "solicitude for collective welfare" ahead of individual rights; who deprecates reduced mortality due to the progress of modern medicine because it has made "biological adaptation unnecessary" by reducing the "selective pressure" (or the survival of the fittest mechanism?) of "genetic evolution"; who strongly disapproves the U.N. General Assembly policy that the family should be encouraged as the basic unit of society and that parents should have the exclusive right to determine freely and responsibly the number of children they wish to bear and support; and he obviously approves "the painful social reforms," that would be necessary to reduce people's desire for children.

J. Ralph Audy, M.D., Ph.D.:—who disparages the "ingrained" attitude of the medical profession

that "the mission of medicine is to combat disease and stave off death"; who feels that we spend too much time with "unhealthy people who are repeatedly getting sick" and that we are too pre-occupied with sick individuals "instead of the public at large." In fact, he believes that "we would all gain greatly . . . if we were to take the . . . in fact almost revolutionary view that the positive physical, mental, and social health of the *public* (rather than patients individually?) comes before anything else. . ."

Now, Dr. Watts, I would like to put to you this question:—Having reviewed the foregoing excerpts of opinions (which you may have previously missed, inadvertently) from the articles which you published with such fanfare in the November issue; and having noted how they conflict with the spirit, ethic and attitude of almost all physicians; would you at this time like to add some sort of qualification to the enthusiastic endorsement you initially lavished on these articles, as to their authoritativeness, etc.?

JAMES H. FORD, M.D.

## Methadone and the Heroin Addict

To the Editor: The article entitled "Methadone Maintenance for Opiate Dependence" by John C. Kramer, M.D., which appeared in the December, 1970, edition of California Medicine, serves a useful purpose in familiarizing its readers with the concept of methadone maintenance.

For those readers interested in a statistical report of one of the oldest of such programs, I refer them to an article in the April, 1970, issue of the AMERICAN JOURNAL OF PSYCHIATRY by Perkins and Bloch. However, it is almost impossible to draw meaningful conclusions from any statistics on this subject, because the rationale for methadone maintenance is that it will reduce the amount of crime committed by addicts. But there is no way of knowing what crimes do not get committed by individuals receiving methadone which would have been committed by these addicts had they not been treated with methadone.